



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590  
**FEB 2 2001**

DOT-E 8451  
(TWENTY-FOURTH REVISION)

EXPIRATION DATE: August 31, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: U.S. Department of Energy  
Washington, DC

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of not more than 25 grams of explosive or pyrotechnic material, including waste containing explosives that has energy density not significantly greater than that of pentaerythritol tetranitrate, classed as Division 1.4E, when packed in a special shipping container. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.320, § 173.3, § 173.54, § 173.60, § 174.3, § 175.3., § 173.52, § 177.801 except as specified herein.
5. BASIS: This exemption is based on the application of Department of Energy's application dated October 2, 2000, submitted in accordance with § 107.109.

FEB 2 2001

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Articles, explosive, n.o.s.(*)	1.4E	UN0471	II

\* Technical name of material being shipped

7. SAFETY CONTROL MEASURES:

## a. Inside packaging must be:

(1) A 4-inch X 14-inch Schedule 80 seamless steel pipe nipple closed at both ends with 4-inch diameter forged steel end caps, 3,000 psi per ASTM 105, or other caps which have been shown by test to contain the explosive effect of 25 grams of PETN, or

(2) A 6-inch X 12 to 14-inch Schedule 80 seamless steel pipe nipple closed at both ends with 6-inch diameter malleable iron end caps with a minimum strength of 250 psi, or other caps which have been shown by test to contain the explosive effect of 25 grams of PETN.

For pipe nipples described in paragraphs a and b, the threads must be cut so that the end caps can be screwed on a minimum of 5 threads by hand, but the caps must be tightened with a wrench.

(3) The device described in "Handling Procedure and Design of a Shipping Container for Transporting Small Samples of Dry Primary Explosives" by Harold K.H. Bartles, presented at the 12th Symposium of Explosives and Pyrotechnics on March 13, 1984 in San Diego, California, USA, which is attached to Schlumberger's application to modify the exemption dated July 7, 1988 and supplemental letter dated July 2, 1992.

(4) The packaging identified as "Model LD-2250" described in "Shipping Containers for Small Samples of High Explosives" by Richard A. Hildner and Manual J. Urizar, Los Alamos National Laboratory Report No. LA-9107-MS/UC-71, Hercules Incorporated's application dated January 14, 1993. The packaging identified as

FEB 2 2001

"Model LD-1000" in this same Laboratory Report may only be used if the net mass of explosives contained within does not exceed 15 grams.

b. The energetic materials must be sealed in a leak-proof receptacle centered internally in the pipe or wrapped with cushioning material to keep the energetic material away from the side walls and ends of the capped pipe container. The devices described in paragraphs a, b, c, and d must be in a cushioned UN 4G fiberboard box, 4C wooden box, 4d plywood box, or a 4A steel box, 4B aluminum box, 4N metal (other than steel or aluminum) box, or a 1A2 removable head steel drum, 1B2 removable head aluminum drum, or 1N2 removable head metal (other than steel or aluminum) drum.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. For purposes of domestic transportation by air in accordance with § 171.11, this document also constitutes an exemption to the International Civil Aviation Organization Technical Instructions on the Safe Transport of Dangerous Goods by air in accordance with Part 1;1.1.1.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo only aircraft.

10. MODAL REQUIREMENTS:

A current copy of the exemption (Appendix A may be shortened to include the first and last pages of Appendix A and the page on which the offeror's name appears), must be carried aboard each aircraft or motor vehicle used to transport packages covered by this exemption. The shipper must furnish a current copy of this exemption to the air carrier before or at the time the shipment is tendered.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous

materials transportation law, 49 U.S.C. 5101 et seq: FEB 2 2001

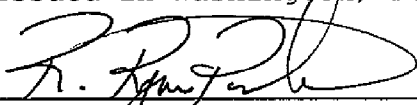
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by 49 CFR 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8 who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving fire, explosion or loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:

  
for Robert A. McGuire  
Associate Administrator  
for Hazardous Materials Safety

FEB 2 2001

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, SW, Washington, DC, 20590-0001, Attention: Records Center, 202-366-5046.

PO: AM

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 5

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
AAI Corporation Hunt Valley, MD	Oct 16, 2000	Dec 1, 2000	Aug 31, 2002
Accurate Energetic Systems LLC McEwen, TN	Oct 2, 2000	Oct 25, 2000	Aug 31, 2002
Accurate Arms Company, Inc., McEwen, TN	Oct 2, 2000	Oct 31, 2000	Aug 31, 2002
Action Manufacturing Company Philadelphia, PA	Nov 15, 2000	Dec 1, 2000	Aug 31, 2002
AEP Technologies, Inc. Woodinville, WA	Sep 21, 2001	Sep 28, 2001	Aug 31, 2002
AET Environmental, Inc. Denver, CO	Apr 11, 2001	Apr 26, 2001	Aug 31, 2002
Alliant Convention Munitions LLC, Hopkins, MN	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Techsystems, Inc. Hopkins, MN	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Integrated Defense Company LLC, Hopkins, MN	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Precision Fuze Company LLC, Janesville, WI	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Ammunition & Powder Company, LLC, Radford, VA	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Power Sources Company LLC, Horsham, PA	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 6

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Alliant Defense Systems LLC Hopkins, MN	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Propulsion & Composites Company, LLC, Magna, UT	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Aerospace Composite Structures Company LLC, Clearfield, UT	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
ATK Tactical Systems Company LLC, Rocket Center, WV (Former grantee: Alliant Missile Product Company LLC)	Nov 21, 2000 & Aug 9, 2001	Aug 17, 2001	Aug 31, 2002
Alliant Aerospace Propulsion Company LLC, Magna, UT	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Aerospace Company, Magna, UT	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Lake City Small Caliber Ammunition Company LLC Independence, MO	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Alliant Ammunition Systems Company LLC, New Brighton, MN	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
American Ordnance LLC Middletown, IA	Dec 14, 2000	Jan 22, 2001	Aug 31, 2002
Applied Energy Technology Corporation Tempe, AZ	Dec 12, 2000	Jan 22, 2001	Aug 31, 2002
Atlantic Research Corporation, Gainesville, VA	Nov 29, 2000	Dec 1, 2000	Aug 31, 2002

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Atlantic Research Corporation Automotive Products Group Knoxville, TN	Sep 26, 2000	Oct 25, 2000	Aug 31, 2002
Austin Powder Company Cleveland, OH	Oct 6, 2000	Dec 1, 2000	Aug 31, 2002
Autoliv Initiator Tremonton West Tremonton, UT	Jan 26, 2001	Jan 29, 2001	Aug 31, 2002
Autoliv Inflators Denver Operations Denver, CO (Former grantee: OEA, Inc.)	Jan 26, 2001	Jan 29, 2001	Aug 31, 2002
Autoliv ASP, Inc. (Formerly: Morton International), Ogden, UT	Jan 26, 2001	Jan 29, 2001	Aug 31, 2002
Automotive Systems Laboratory, Inc. Armada, MI	Dec 1, 2000	Dec 1, 2000	Aug 31, 2002
BAE Systems East Camden, AR	Feb 23, 2001	Mar 1, 2001	Aug 31, 2002
Baker Hughes Houston, TX (Former grantee: Baker Atlas)	Nov 20, 2000	Dec 1, 2000	Aug 31, 2002
Battelle Columbus Operations Columbus, OH	Oct 6, 2000	Dec 1, 2000	Aug 31, 2002
Breed Technologies, Inc. Lakeland, FL	Oct 17, 2000	Dec 1, 2000	Aug 31, 2002
Bulova Technologies, LLC Lancaster, PA	Dec 12, 2000	Dec 21, 2000	Aug 31, 2002
BWXT Pantex, LLC Amarillo, TX	Dec 20, 2000	Jan 29, 2001	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 8

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
BWXT Y-12 LLC Oak Ridge, TN	Sep 26, 2000	Oct 12, 2000	Aug 31, 2002
Cambridge Isotope Laboratories Andover, MA	Dec 4, 2000	Dec 14, 2000	Aug 31, 2002
Cartridge Actuated Devices, Inc., Fairfield, NJ	Dec 4, 2000	Dec 14, 2000	Aug 31, 2002
Cartridge Actuated Devices, Incorporated Bryam, NJ	Dec 4, 2000	Dec 14, 2000	Aug 31, 2002
Cerilliant Corporation Austin TX	Nov 27, 2000	Dec 1, 2000	Aug 31, 2002
Concurrence Technologies Corporation Johnstown, PA	Mar 8, 2001	Mar 9, 2001	Aug 31, 2002
Copperhead Chemical Co., Inc. Tamaqua, PA	Jan 26, 2001	Feb 27, 2001	Aug 31, 2002
Day & Zimmerman, Inc Texarkana, TX	Nov 2, 2000	Dec 1, 2000	Aug 31, 2002
Day & Zimmermann, Inc. Parsons, KS	Jan 9, 2001	Jan 22, 2001	Aug 31, 2002
Dayron Orlando, FL	Dec 7, 2000	Dec 21, 2000	Aug 31, 2002
DE LA MARE Engineering, Inc. San Fernando, CA	Aug 17, 2001	Sep 10, 2001	Aug 31, 2002
Delphi Automotive Systems LLC Troy, MI	Jun 4, 2001	Jun 28, 2001	Aug 31, 2002
Dnyo Nobel, Inc. Salt Lake City, UT	Oct 2, 2000	Oct 10, 2000	Aug 31, 2002



OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 9

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Duratek Federal Services, Inc. Richland, WA (Former grantee: Waste Management Services, Inc.)	Apr 9, 2001	Apr 26, 2001	Aug 31, 2002
Eagle-Picher Technologies, LLC, Joplin, MI	Oct 26, 2000	Dec 1, 2000	Aug 31, 2002
Eastman Kodak Company Rochester, NY	Jan 5, 2001	Jan 22, 2001	Aug 31, 2002
Electronics Development Corporation, Columbia, MD	Dec 12, 2000	Dec 21, 2000	Aug 31, 2002
Energetic Materials Research and Testing Center (EMRTC) a division of New Mexico Tech (NMT), Socorro, NM	Nov 22, 2000	Dec 1, 2000	Aug 31, 2002
Ensign-Bickford Aerospace & Defense Company Simsbury, CT	Jan 2, 2001	Jan 29, 2001	Aug 31, 2002
Ensign-Bickford Company Simsbury, CT	Oct 2, 2000	Dec 1, 2000	Aug 31, 2002
Ethyl Corporation Richmond, VA	Nov 13, 2000	Dec 1, 2000	Aug 31, 2002
Federal Cartridge Company Anoka, MN	Jan 25, 2001	Feb 26, 2001	Aug 31, 2002
GenCorp Aerojet Sacramento, CA	Nov 10, 2000	Dec 1, 2000	Aug 31, 2002
General Dynamics Armament Systems Burlington, VT	Jan 18, 2001	Jan 23, 2001	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 10

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
General Dynamics Ordnance and Tactical Systems, Inc. St. Petersburg, FL (Former grantee: Primex Technologies, Inc.)	Sep 22, 2000 and Feb 26, 2001	Mar 9, 2001	Aug 31, 2002
General Sciences, Inc. Souderton, PA	Feb 6, 2001	Feb 27, 2001	Aug 31, 2002
General Electric Aircraft Engines, Cincinnati, OH	Nov 8, 2000	Dec 1, 2000	Aug 31, 2002
General Dynamics Ordnance & Tactical Systems Redmond, WA (Former grantee: Primex Aerospace Company)	Nov 24, 2000 & Feb 20, 2001	Feb 26, 2001	Aug 31, 2002
General Dynamics Armament Systems Princeton Combustion Research Laboratories Monmouth Junction, NJ	Jan 18, 2001	Jan 23, 2001	Aug 31, 2002
General Dynamics Ordnance & Tactical (Hitech), Inc. East Camden, AR (Former grantee: Hitech, Inc.)	Nov 3, 2000 and Mar 1, 2001	Mar 9, 2001	Aug 31, 2002
General Dynamics Ordnance and Tactical Systems Niceville, FL (Former grantee: Orlando Technology, Inc.)	Nov 3, 2000 and Mar 14, 2001	Mar 23, 2001	Aug 31, 2002
GOEX International, Inc. Cleburne, TX	Oct 2, 2000	Dec 1, 2000	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 11

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Gradient Technology Blaine, MN	May 9, 2001 & May 16, 2001	May 17, 2001	Aug 31, 2002
Halliburton Energy Services Alvarado, TX	Feb 19, 2001	Mar 8, 2001	Aug 31, 2002
Hanley Industries, Inc Alton, IL	Oct 4, 2000	Dec 1, 2000	Aug 31, 2002
Hercules, Inc. Wilmington, DE	Dec 19, 2000	Jan 22, 2001	Aug 31, 2002
Hi-Shear Technology Corporation, Torrance, CA	Dec 12, 2000	Jan 22, 2001	Aug 31, 2002
Hodgdon Powder Company, Inc. Shawnee Mission, KS	Nov 8, 2000	Nov 9, 2000	Aug 31, 2002
Honeywell International Inc. Morristown, NJ (Former grantee: Allied-Signal, Inc.)	Oct 6, 2000	Oct 25, 2000	Aug 31, 2002
ICI Explosives Environmental Company, Joplin, MO	Nov 2, 2000	Dec 1, 2000	Aug 31, 2002
ICI Security Systems (a business unit of ICI Americas, Inc.) Bryon, GA	Mar 23, 2001	Apr 5, 2001	Aug 31, 2002
Idaho National Engineering & Environmental Lab, c/o Lockheed Martin Idaho Technologies Company Idaho Falls, ID	Nov 15, 2000	Dec 1, 2000	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 12

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Inflation Systems Inc. (Formerly: Takata Moses Lake, Inc.), Moses Lake, WA	Nov 30, 2000	Dec 1, 2000	Aug 31, 2002
Inflation Systems Inc. LaGrange, GA	Nov 30, 2000	Dec 1, 2000	Aug 31, 2002
Jet Research Center Alvarado, TX	Feb 26, 2001	Mar 1, 2001	Aug 31, 2002
Kaman Aerospace Corporation, Raymond Engineering Operations (Formerly: Raymond Engineering, Inc.) Middletown, CT	Nov 13, 2000	Dec 1, 2000	Aug 31, 2002
KDI Precision Products, Inc. Cincinnati, OH	Oct 5, 2000	Dec 1, 2000	Aug 31, 2002
Kilgore Flares Company, LLC Toone, TN (Former grantee: Alliant Kilgore Flares Company LLC,)	Nov 21, 2000 & Apr 30, 2001	May 11, 2001	Aug 31, 2002
Lawrence Livermore National Laboratory Livermore, CA	Oct 4, 2000	Dec 1, 2000	Aug 31, 2002
LifeSparc Inc Hollister, Ca	Oct 3, 2000	Oct 25, 2000	Aug 31, 2002
Lockheed Martin Missiles & Fire Control Dallas, TX (Former grantee: Lockheed Martin Vought Systems Corporation)	Nov 17, 2000	Dec 1, 2000	Aug 31, 2002

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Lockheed Missiles & Space Company, Sunnyvale, CA	Dec 11, 2000	Dec 21, 2000	Aug 31, 2002
Los Alamos National Laboratory Los Alamos, NM	Nov 15, 2000	Dec 1, 2000	Aug 31, 2002
Lutrel Trucking, Inc. Bakersfield, CA	Aug 30, 2000	Sep 12, 2000	Aug 31, 2002
Martin Electronics, Inc. Perry, FL	Oct 3, 2000	Dec 1, 2000	Aug 31, 2002
McCormick Selph Inc. Hollister, CA (Former grantee: Teledyne Ryan Aero)	Oct 20, 2000 and Jul 18, 2000	Jul 19, 2001	Aug 31, 2002
Motorola, Inc. Scottsdale, AZ	Jan 8, 2001	Jan 22, 2001	Aug 31, 2002
National Aeronautics & Space Administration, (NASA) Washington, D.C.	Aug 29, 2000	Sep 22, 2000	Aug 31, 2002
New River Energetic, Inc. Radford, VA	Nov 21, 2000	Dec 1, 2000	Aug 31, 2002
Northrop Grumman Corporation Electronic Sensors & Systems Division, Huntsville, AL	Nov 27, 2000	Dec 1, 2000	Aug 31, 2002
O'Brien Design Associates, Inc. Charlestown, RI	Jul 23, 2001 & July 30, 2001	Aug 17, 2001	Aug 31, 2002
Olin Corporation Winchester Group East Alton, IL	Jul 20, 2001 & Aug 6, 2001	Aug 9, 2001	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 14

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Onyx Environmental Services, L.L.C. Flanders, NJ	Nov 30, 2000	Dec 4, 2000	Aug 31, 2002
Organic Technology, Inc. Ft. Worth, TX	Nov 28, 2000	Dec 1, 2000	Aug 31, 2002
Orica USA Inc. (Formerly: Energetic Solutions Inc.) Englewood, CO	Nov 28, 2000	Dec 1, 2000	Aug 31, 2002
Owen Oil Tools Inc. Ft. Worth, TX	Nov 28, 2000	Dec 1, 2000	Aug 31, 2002
Pacific Northwest National Laboratory, Richland, WA.	Dec 15, 2000	Jan 22, 2001	Aug 31, 2002
Pacific Scientific Chandler, AZ	Nov 16, 2000	Dec 1, 2000	Aug 31, 2002
PerkinElmer Optoelectronics Miamisburg, OH (Former grantee: EG&G Optoelectronics)	Oct 25, 2000	Dec 1, 2000	Aug 31, 2002
Primex Technologies, Ordnance and Tactical Systems Division, St. Petersburg, FL	Nov 1, 2000	Jan 22, 2001	Aug 31, 2002
Primex Physics International Company, d/b/a/ Primex Technologies, Ordnance & Tactical System Division, Tracy, CA	Nov 1, 2000	Dec 1, 2000	Aug 31, 2002
PyroLabs, Inc. Whitewater, CO	Oct 9, 2000	Dec 1, 2000	Aug 31, 2002
Pyrotechnic Specialties, Inc., Bryon, GA	Dec 8, 2000	Dec 21, 2000	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 15

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
R&R Trucking, Incorporated Duenweg, MO	Dec 8, 2000	Dec 21, 2000	Aug 31, 2002
Raytheon Company Fort Wayne, IN (Former grantee: Raytheon Systems Company)	Feb 20, 2001	Feb 27, 2001	Aug 31, 2002
Remington Arms Company, Inc., Madison, NC	Dec 19, 2000	Jan 22, 2001	Aug 31, 2002
Reynolds Industries Systems Inc. (RISI) San Ramon, CA	May 23, 2001	May 23, 2001	Aug 31, 2002
Robert Research Laboratory Torrance, CA	Dec 7, 2000 and Mar 13, 2001	Mar 19, 2001	Aug 31, 2002
Royal Ordnance North America, Inc. Holston Army Ammunitions Plant Kingsport, TN	Oct 20, 2000	Dec 1, 2000	Aug 31, 2002
Sandia National Laboratories Albuquerque, NM	Oct 9, 2000	Dec 1, 2000	Aug 31, 2002
Sandia National Laboratories Livermore, CA	Dec 20, 2000	Jan 22, 2001	Aug 31, 2002
Schlumberger Well Service Rosharon, TX	Nov 7, 2000	Dec 1, 2000	Aug 31, 2002
Shock Tube Systems, Inc. , Moosup, CT	Aug 6, 2001	Sep 10, 2001	Aug 31, 2002
Scot Incorporated Downers Grove, IL	Dec 6, 2000	Dec 21, 2000	Aug 31, 2002
Special Devices, Inc. Moorpark, CA	Nov 27, 2000	Dec 1, 2000	Aug 31, 2002

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
SRI International Menlo, CA	Aug 16, 2000	Sep 12, 2000	Aug 31, 2002
St. Marks Powder Crawfordville, FL	Nov 15, 2000	Dec 1, 2000	Aug 31, 2002
Stored Energy Concepts, Inc. St. Peters's, PA	Mar 5, 2001	Mar 22, 2001	Aug 31, 2002
Stresau Laboratory, Inc. Spooner, WI	Sep 5, 2000	Oct 2, 2000	Aug 31, 2002
Talley Defense Systems, Inc., Mesa, AZ	Dec 14, 2000	Dec 21, 2000	Aug 31, 2002
Technanogy, LLC Irvine, CA (Former grantee: NanoPropulsion Company, LLC)	Oct 23, 2000	Dec 1, 2000	Aug 31, 2002
Technical Ordnance, Inc. St. Bonifacius, MN	Oct 16, 2000	Dec 1, 2000	Aug 31, 2002
The Boeing Company Mesa, AZ	Dec 15, 2000	Jan 22, 2001	Aug 31, 2002
The Boeing Company The Military Aircraft & Missiles Systems Group Seattle, WA	Jan 15, 2001	Jan 29, 2001	Aug 31, 2002
The Boeing Company Canoga Park, CA	Feb 20, 2001	Mar 8, 2001	Aug 31, 2002
Thiokol Propulsion A Division of Cordant Technologies Inc. Brigham City, UT	Nov 29, 2000	Dec 1, 2000	Aug 31, 2002
TPL, Inc. Albuquerque, NM	Nov 10, 2000	Dec 1, 2000	Aug 31, 2002



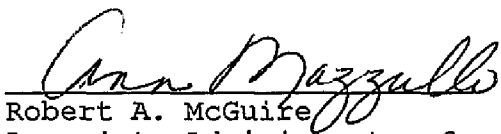
Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
TPL, Inc. Ft Wingate Army Depot Ft. Wingate, NM	Nov 10, 2000	Dec 1, 2000	Aug 31, 2002
Tri-State Motor Transit, Inc. Joplin, MO	Jan 5, 2001	Jan 22, 2001	Aug 31, 2002
TRW Automotive Queen Creek, AZ	Nov 28, 2000	Dec 1, 2000	Aug 31, 2002
United Technologies Corporation/Chemical Systems Division San Jose, CA	Apr 10, 2001	Apr 23, 2001	Aug 31, 2002
United States Department of Defense Falls Church, VA	Oct 18, 2000	Dec 1, 2000	Aug 31, 2002
Universal Propulsion Company, Inc., Phoenix, AZ	Oct 18, 2000	Dec 1, 2000	Aug 31, 2002
Universal Propulsion Company California Operations Fairfield, CA (Former grantee: OEA Aerospace, Inc.)	Mar 28, 2001 and Mar 29, 2001	Apr 3, 2001	Aug 31, 2002
URS Radian Austin, TX (Former grantee: Radian International LLC)	Nov 28, 2000	Dec 1, 2000	Aug 31, 2002
US DOT Research & Specials Programs Administration (RSPA) Office of Hazardous Materials Enforcement Washington, DC	Oct 18, 2000	Dec 1, 2000	Aug 31, 2002
UT-Battelle, LLC Oak Ridge, TN	Oct 25, 2000	Dec 1, 2000	Aug 31, 2002

OCT 11 2001

Continuation of DOT-E 8451 (24th Rev.) APPENDIX A

Page 18

Company Name City/State	Applica- tion Date	Issue Date	Expiration Date
Vulcan Systems, Inc. Colorado Springs, CO	Oct 4, 2001	OCT 11 2001	Aug 31, 2002
Westinghouse Savannah River Company, Aiken, SC	Oct 10, 2000	Dec 1, 2000	Aug 31, 2002

*for*   
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety